



1826650_1.TXT

SEQUENCE LISTING

<110> Usdin, Ted B.
Hoare, Samuel R.J.

<120> PARATHYROID HORMONE RECEPTOR LIGANDS

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<140> US 10/014,162

<141> 2001-12-11

<150> PCT/US00/16776

<151> 2000-06-15

<150> US 60/139,335

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aggcggcggg	ccgcgggccg	agacccacgg	taaccgcctc	tttccatctc	ccggcagact	540
ccgcaccccc	ggcgaggctc	gggcgggtcc	ggccaccccc	cagtcgcggc	ggagcctggc	600

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gctggcggac	gacgcggcct	tccgggagcg	cgcgcggtg	ctggccgccc	tcgagcgccc	660
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ccgccccacc	tcaataaaga	ccgtgctgtg	cctcccgact	gcgcctcctt	cctacgcctc	780
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<210> 108
 <211> 1515
 <212> DNA
 <213> Homo sapiens

<400> 108

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gtggcggcca	aggcagcggc	aggtccccc	cccccggtc	ctcattaccg	ctggcggtc	180
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cggtgcgggg	gctgcggagg	cgatataagg	gggctgccac	catcgctgcc	ccagcccact	300
gcacggtagg	ggactgtgcg	ggaagctggg	ggtggatgca	tgggtggggcc	cggggttctg	360
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gagaaagggg	acggaagatc	cagaaagcgg	aacagaagcc	caaagagagg	gcgaccgaga	660
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gtggtgcggg	aaatggacag	aaaatcagca	agggaaagag	acacagaaa	atagatccc	780
agaaaggcgt	ggagaggctc	gaaaggagtc	gttgcagaaa	cggattcatt	ctttgagcaa	840
cgtttattgg	gttcttggtg	tgcgctggc	catgcgtga	gcgctgtggg	cggacaagt	900
catcagactc	ggtctcagta	cctggggagt	ttcgaacctg	gtgagcagag	agacagagac	960
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cgcggtcacc	gcgtctctcc	acagcctccg	ccccccagga	cgggcctggg	cggatccccg	1140
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<210> 109
 <211> 545
 <212> PRT
 <213> Rattus norvegicus

<400> 109

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Arg	Ser	Cys	Leu	Leu	Val	Gly	Ala	Gln	Leu	Asp	Ser	Asp	Gly	Thr	Ile
			20					25					30		
Thr	Ile	Glu	Glu	Gln	Ile	Val	Leu	Val	Met	Lys	Ala	Lys	Met	Gln	Cys
		35					40					45			
Glu	Leu	Asn	Ile	Thr	Ala	Gln	Phe	Gln	Glu	Gly	Glu	Gly	Asn	Cys	Phe
	50					55					60				
Pro	Glu	Trp	Asp	Gly	Leu	Ile	Cys	Trp	Pro	Arg	Gly	Thr	Ala	Gly	Thr
65					70					75				80	
Lys	Ser	Ala	Met	Pro	Cys	Pro	Ser	Tyr	Val	Tyr	Asp	Phe	Asn	His	Lys
			85						90					95	
Gly	Val	Ala	Phe	Arg	His	Cys	Thr	Pro	Asn	Gly	Thr	Trp	Asp	Phe	Ile
			100					105					110		
His	Gly	Ser	Asn	Lys	Thr	Trp	Ala	Asn	Tyr	Ser	Asp	Cys	Phe	Leu	Gln
	115						120					125			
Pro	Asp	Ile	Asn	Ile	Gly	Lys	Gln	Glu	Phe	Phe	Glu	Asn	Leu	Tyr	Ile
	130					135					140				
Leu	Tyr	Thr	Val	Gly	Tyr	Ser	Ile	Ser	Phe	Gly	Ser	Leu	Ala	Val	Ala

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145	Ile	Leu	Ile	Ile	Gly	150	Tyr	Phe	Arg	Arg	Leu	155	His	Cys	Thr	Arg	Asn	160	Tyr
				165	Leu						170						175		
	Ile	His	Leu	His	Leu	Phe	Val	Ser	Phe	Met	Leu	Arg	Ala	Met	Ser	Ile			
			180																
	Phe	Val	Lys	Asp	Arg	Val	Ala	Gln	Ala	His	Leu	Gly	Val	Glu	Ala	Leu			
			195																
	Gln	Ser	Leu	Val	Met	Gln	Gly	Asp	Leu	Gln	Asn	Phe	Ile	Gly	Gly	Pro			
			210																
	Ser	Val	Asp	Lys	Ser	Gln	Tyr	Val	Gly	Cys	Lys	Ile	Ala	Val	Val	Met			
			225																
	Phe	Ile	Tyr	Phe	Leu	Ala	Thr	Asn	Tyr	Tyr	Trp	Ile	Leu	Val	Glu	Gly			
				245															
	Leu	Tyr	Leu	His	Asn	Leu	Ile	Phe	Val	Ser	Phe	Phe	Ser	Asp	Thr	Lys			
				260															
	Tyr	Leu	Trp	Gly	Phe	Ile	Leu	Ile	Gly	Trp	Phe	Pro	Ala	Val	Phe	Val			
			275																
	Val	Ala	Trp	Ala	Val	Ala	Arg	Ala	Thr	Leu	Ala	Asp	Thr	Arg	Cys	Trp			
			290																
	Glu	Leu	Ser	Ala	Gly	Asp	Arg	Trp	Ile	Tyr	Gln	Ala	Pro	Ile	Leu	Ala			
			305																
	Ala	Ile	Gly	Leu	Asn	Phe	Ile	Leu	Phe	Leu	Asn	Thr	Val	Arg	Val	Leu			
				325															
	Ala	Thr	Lys	Ile	Trp	Glu	Thr	Asn	Ala	Val	Gly	His	Asp	Met	Arg	Lys			
			340																
	Gln	Tyr	Arg	Lys	Leu	Ala	Lys	Ser	Thr	Leu	Val	Leu	Val	Leu	Val	Phe			
			355																
	Gly	Val	His	Tyr	Ile	Val	Phe	Ile	Cys	Cys	Pro	His	Ser	Phe	Ser	Gly			
			370																
	Leu	Trp	Trp	Glu	Ile	Arg	Met	His	Cys	Glu	Leu	Phe	Phe	Asn	Ser	Phe			
			385																
	Gln	Gly	Phe	Phe	Val	Ser	Ile	Val	Tyr	Cys	Tyr	Cys	Asn	Gly	Glu	Val			
				405															
	Gln	Ala	Glu	Val	Lys	Lys	Thr	Trp	Thr	Arg	Trp	Asn	Leu	Ser	Ile	Asp			
			420																
	Trp	Lys	Lys	Ala	Pro	Pro	Cys	Gly	Gly	His	Arg	Tyr	Gly	Ser	Val	Leu			
			435																
	Thr	Thr	Val	Thr	His	Ser	Thr	Ser	Ser	Gln	Ser	Gln	Met	Gly	Pro	Ser			
			450																
	Thr	Arg	Leu	Val	Leu	Ile	Ser	Ser	Lys	Pro	Ala	Lys	Thr	Ala	Cys	Arg			
			465																
	Gln	Ile	Asp	Ser	His	Val	Thr	Leu	Pro	Gly	Tyr	Val	Trp	Ser	Ser	Ser			
				485															
	Glu	Gln	Asp	Cys	Gln	Pro	Gln	Ser	Thr	Pro	Glu	Glu	Thr	Lys	Lys	Gly			
			500																
	His	Gly	Arg	Gln	Glu	Asp	Asp	Ser	Pro	Val	Gly	Glu	Ser	Ser	Arg	Pro			
			515																
	Val	Ala	Phe	Thr	Ile	Asp	Thr	Glu	Gly	Cys	Lys	Gly	Glu	Ser	His	Pro			
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	Ile																		
			545																

<210> 110
 <211> 550
 <212> PRT
 <213> Homo Sapiens

<400> 110
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 Gly Ser Cys Leu Leu Ala Arg Ala Gln Leu Asp Ser Asp Gly Thr Ile
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Thr	Ile	Glu	Glu	Gln	Ile	Val	Leu	Val	Leu	Lys	Ala	Lys	Val	Gln	Cys
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Glu	Leu	Asn	Ile	Thr	Ala	Gln	Leu	Gln	Glu	Gly	Glu	Gly	Asn	Cys	Phe
	50					55					60				
Pro	Glu	Trp	Asp	Gly	Leu	Ile	Cys	Trp	Pro	Arg	Gly	Thr	Val	Gly	Lys
65					70					75					80
Ile	Ser	Ala	Val	Pro	Cys	Pro	Pro	Tyr	Ile	Tyr	Asp	Phe	Asn	His	Lys
				85					90					95	
Gly	Val	Ala	Phe	Arg	His	Cys	Asn	Pro	Asn	Gly	Thr	Trp	Asp	Phe	Met
			100					105					110		
His	Ser	Leu	Asn	Lys	Thr	Trp	Ala	Asn	Tyr	Ser	Asp	Cys	Leu	Arg	Phe
		115					120					125			
Leu	Gln	Pro	Asp	Ile	Ser	Ile	Gly	Lys	Gln	Glu	Phe	Phe	Glu	Arg	Leu
	130					135					140				
Tyr	Val	Met	Tyr	Thr	Val	Gly	Tyr	Ser	Ile	Ser	Phe	Gly	Ser	Leu	Ala
145					150					155					160
Val	Ala	Ile	Leu	Ile	Ile	Gly	Tyr	Phe	Arg	Arg	Leu	His	Cys	Thr	Arg
				165					170					175	
Asn	Tyr	Ile	His	Met	His	Leu	Phe	Val	Ser	Phe	Met	Leu	Arg	Ala	Thr
			180					185					190		
Ser	Asp	Phe	Val	Lys	Asp	Arg	Val	Val	His	Ala	His	Ile	Gly	Val	Lys
		195					200					205			
Glu	Leu	Glu	Ser	Leu	Ile	Met	Gln	Asp	Asp	Pro	Gln	Asn	Ser	Ile	Glu
	210					215					220				
Ala	Thr	Ser	Val	Asp	Lys	Ser	Gln	Tyr	Ile	Gly	Cys	Lys	Ile	Ala	Val
225					230					235					240
Val	Met	Phe	Ile	Tyr	Phe	Leu	Ala	Thr	Asn	Tyr	Tyr	Trp	Ile	Leu	Val
				245					250					255	
Glu	Gly	Leu	Tyr	Leu	His	Asn	Leu	Ile	Phe	Val	Ala	Phe	Phe	Ser	Asp
			260					265					270		
Thr	Lys	Tyr	Leu	Trp	Gly	Phe	Ile	Leu	Ile	Gly	Trp	Gly	Phe	Pro	Ala
		275					280					285			
Ala	Phe	Val	Ala	Ala	Trp	Ala	Val	Ala	Arg	Ala	Thr	Leu	Ala	Asp	Ala
	290					295					300				
Arg	Cys	Trp	Glu	Leu	Ser	Ala	Gly	Asp	Ile	Lys	Trp	Ile	Tyr	Gln	Ala
305					310					315					320
Pro	Ile	Leu	Ala	Ala	Ile	Gly	Leu	Asn	Phe	Ile	Leu	Phe	Leu	Asn	Thr
				325					330					335	
Val	Arg	Val	Leu	Ala	Thr	Lys	Ile	Trp	Glu	Thr	Asn	Ala	Val	Gly	His
			340					345					350		
Asp	Thr	Arg	Lys	Gln	Tyr	Arg	Lys	Leu	Ala	Lys	Ser	Thr	Leu	Val	Leu
		355					360					365			
Val	Leu	Val	Phe	Gly	Val	His	Tyr	Ile	Val	Phe	Val	Cys	Leu	Pro	His
	370					375					380				
Ser	Phe	Thr	Gly	Leu	Gly	Trp	Glu	Ile	Arg	Met	His	Cys	Glu	Leu	Phe
385					390					395					400
Phe	Asn	Ser	Phe	Gln	Gly	Phe	Phe	Val	Ser	Ile	Ile	Tyr	Cys	Tyr	Cys
				405					410					415	
Asn	Gly	Glu	Val	Gln	Ala	Glu	Val	Lys	Lys	Met	Trp	Ser	Arg	Trp	Asn
			420					425					430		
Leu	Ser	Val	Asp	Trp	Lys	Arg	Thr	Pro	Pro	Cys	Gly	Ser	Arg	Arg	Cys
		435					440					445			
Gly	Ser	Val	Leu	Thr	Thr	Val	Thr	His	Ser	Thr	Ser	Ser	Gln	Ser	Gln
	450					455					460				
Val	Ala	Ala	Ser	Thr	Arg	Met	Val	Leu	Ile	Ser	Gly	Lys	Ala	Ala	Lys
465					470					475					480
Ile	Ala	Ser	Arg	Gln	Pro	Asp	Ser	His	Ile	Thr	Leu	Pro	Gly	Tyr	Val
				485					490					495	
Trp	Ser	Asn	Ser	Glu	Gln	Asp	Cys	Leu	Pro	His	Ser	Phe	His	Glu	Glu
		500						505					510		
Thr	Lys	Glu	Asp	Ser	Gly	Arg	Gln	Gly	Asp	Asp	Ile	Leu	Met	Glu	Lys
		515					520					525			
Pro	Ser	Arg	Pro	Met	Glu	Ser	Asn	Pro	Asp	Thr	Glu	Gly	Cys	Gln	Gly

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 Glu Thr Glu Asp Val Leu
 545 550

<210> 111
 <211> 40
 <212> PRT
 <213> Bos Taurus

<400> 111
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 Ser Met Glu Arg Val Glu Trp Leu Arg Lys Lys Leu Gln Asp Val His
 20 25 30
 Asn Phe Val Ala Leu Gly Ala Ser
 35 40

<210> 112
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 112
 Ala Val Ser Glu His Gln Leu Leu His Asp Lys Gly Lys Ser Ile Gln
 1 5 10 15
 Asp Leu Arg Arg Arg Phe Phe Leu His His Leu Ile Ala Glu Ile His
 20 25 30
 Thr Ala Glu Ile Arg Ala Thr
 35

<210> 113
 <211> 21
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> synthetic peptide

<400> 113
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 Ser Glu Gln Asp Cys
 20